IN THE CLAIMS

1-2. (cancelled)

3. (currently amended) An assembly as claimed in claim 20 ~~2~~, wherein said thermally conductive material includes solder.

4. (currently amended) An assembly as claimed in claim 20 ~~2~~, wherein said thermally conductive material includes a thermally conductive paste.

5-7. (cancelled)

8. (currently amended) An assembly as claimed in claim 20 ~~2~~, wherein said second chip includes a plurality of passive electrical components.

9. (currently amended) An assembly as claimed in claim 20 ~~8~~, further comprising a plurality of said second chips.

10. (currently amended) An assembly as claimed in claim 20 ~~2~~, further comprising one or more discrete passive electrical components electrically connected to the terminals of said chip carrier.

11. (currently amended) An assembly as claimed in claim 20 ~~2~~, further comprising a plurality of discrete passive electrical components electrically connected to at least one of said chips.

12. (currently amended) ~~An assembly as claimed in claim 2,~~ An assembly comprising:

a packaged semiconductor chip including:

(a) a first semiconductor chip having a front face, a rear face, edges bounding said faces and contacts exposed at said front face, ~~wherein~~ each of the faces of said first chip has a first area ~~and said opening of said chip carrier coincides with said rear surface of said second chip over~~;

(b) a second chip, said second chip having front and rear surfaces and contacts on said front surface, at least some of said contacts on said second chip being electrically connected to at least some of said contacts on said first chip, said front

surface of said second chip facing upwardly and confronting a face of said first chip; and

(c) a chip carrier disposed below said rear surface of said second chip, said chip carrier having a bottom surface facing downwardly away from said second chip and having a plurality of terminals exposed at said bottom surface, at least some of said terminals being electrically connected to at least one of said chips, said chip carrier having an opening coinciding with at least a portion of said rear surface of said second chip, said portion having a second area larger than said first area~~.~~;

a circuit panel mounted to said bottom surface of said chip carrier, said circuit panel having a top surface and including a thermally conductive element having a mounting surface extending in directions parallel to said top surface; and

a flowable thermally conductive material uniformly covering at least a substantial portion of said rear surface, said flowable thermally conductive material connecting said rear surface of said second chip to said mounting surface of said thermally conductive element and spacing said rear surface of said second chip from said mounting surface, such that said rear surface of said second chip thermally communicates with said circuit panel through said flowable thermally conductive material.

13. (cancelled)

14. (currently amended) An assembly as claimed in claim 20~~—2~~, wherein said rear face of said first chip faces downwardly towards said front surface of said second chip.

15. (previously presented) An assembly as claimed in claim 14, further comprising leads connecting at least some of said contacts of said first chip and at least some of said contacts of said second chip.

16. (previously presented) An assembly as claimed in claim 14, further comprising a thermally-conductive layer between said rear face of said first chip and said front face of said second chip.

17. (currently amended) An assembly as claimed in claim 20~~—2~~, wherein said front face of said first chip faces downwardly towards said front surface of said second chip.

18. (previously presented) An assembly as claimed in claim 17, wherein said contacts of said first chip are bonded to said contacts of said second chip, said first chip being in thermal communication with said second chip through said bonded contacts.

19. (previously presented) An assembly as claimed in claim 18, further comprising a thermally conductive underfill between said first and second chips, said first chip being in thermal communication with said second chip through said underfill.

20. (currently amended) ~~An assembly as claimed in claim 2, wherein said chip carrier is~~ An assembly comprising:

a packaged semiconductor chip including:

(a) a first semiconductor chip having a front face, a rear face, edges bounding said faces and contacts exposed at said front face;

(b) a second chip, said second chip having front and rear surfaces and contacts on said front surface, at least some of said contacts on said second chip being electrically connected to at least some of said contacts on said first chip, said front surface of said second chip facing upwardly and confronting a face of said first chip; and

(c) a sheet-like ~~element~~ chip carrier disposed below said rear surface of said second chip, said chip carrier having a thickness less than about 150 microns, a bottom surface facing downwardly away from said second chip and having a plurality of

terminals exposed at said bottom surface, at least some of said terminals being electrically connected to at least one of said chips, said chip carrier having an opening coinciding with at least a portion of said rear surface of said second chip;

a circuit panel mounted to said bottom surface of said chip carrier, said circuit panel having a top surface and including a thermally conductive element having a mounting surface extending in directions parallel to said top surface; and

a flowable thermally conductive material uniformly covering at least a substantial portion of said rear surface, said flowable thermally conductive material connecting said rear surface of said second chip to said mounting surface of said thermally conductive element and spacing said rear surface of said second chip from said mounting surface, such that said rear surface of said second chip thermally communicates with said circuit panel through said flowable thermally conductive material.

21. (cancelled)

22. (currently amended) An assembly as claimed in claim 20~~—2~~, wherein said first chip is a radio frequency amplifier chip.

23. (new) An assembly as claimed in claim 12, wherein said thermally conductive material includes solder.

24. (new) An assembly as claimed in claim 12, wherein said thermally conductive material includes a thermally conductive paste.

25. (new) An assembly as claimed in claim 12, wherein said chip carrier is a sheet-like element.

26. (new) An assembly comprising:

a packaged semiconductor chip including:

(a) a first semiconductor chip having a front face, a rear face, edges bounding said faces and contacts exposed at said front face;

(b) a second chip, said second chip having front and rear surfaces and contacts on said front surface, at least some of said contacts on said second chip being electrically connected to at least some of said contacts on said first chip, said front surface of said second chip facing upwardly and confronting a face of said first chip; and

(c) a sheet-like chip carrier disposed below said rear surface of said second chip, a bottom surface facing downwardly away from said second chip and having a plurality of terminals exposed at said bottom surface, at least some of said terminals being electrically connected to at least one of said chips, said chip carrier having an opening coinciding with at least a portion of said rear surface of said second chip;

a circuit panel mounted to said bottom surface of said chip carrier, said circuit panel having a top surface and including a thermally conductive element having a mounting surface extending in directions parallel to said top surface; and

a flowable thermally conductive material uniformly covering at least a substantial portion of said rear surface, said flowable thermally conductive material connecting said rear surface of said second chip to said mounting surface of said thermally conductive element and spacing said rear surface of said second chip from said mounting surface, such that said rear surface of said second chip thermally communicates with said circuit panel through said flowable thermally conductive material.